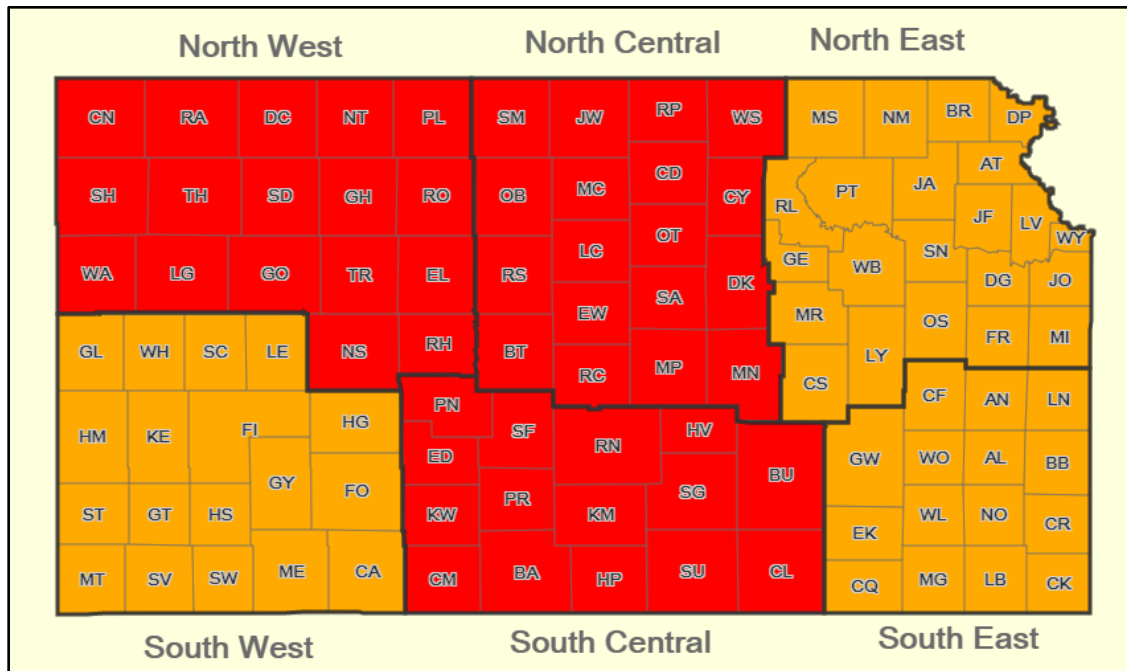


# Kansas West Nile Virus Weekly Surveillance and Transmission Risk Report

Week Ending September 14, 2019 (MMWR Week 37)



## RISK LEVEL



Key to West Nile virus Risk Levels in Kansas - 2018		
Risk	What it Means	What You Can Do
Minimal	Mosquito surveillance is conducted mid-May – mid-October however infection with WNV is unlikely. This does not mean the risk is zero.	<b>To Prepare:</b> Know your risk – check regularly at <a href="http://www.kdheks.gov/epi/arboviral_disease.htm">http://www.kdheks.gov/epi/arboviral_disease.htm</a> <b>Mosquito-Proof Your Home:</b> <ul style="list-style-type: none"> <li>Keep screens on windows and doors in good repair.</li> <li>Use air conditioning if you have it.</li> <li><b>DRAIN</b> - Reduce number of mosquitoes around your home by emptying standing water from flowerpots, gutters, buckets, pool covers, pet water dishes, discarded tires, and birdbaths on a regular basis.</li> </ul>
Low	The mosquitoes that carry WNV is present in small numbers. There is a low probability of being bitten by an infected mosquito.	<b>To Prevent:</b> <ul style="list-style-type: none"> <li>Wear mosquito repellent between dusk to dawn</li> <li>Wear long sleeves and long pants from dusk to dawn</li> <li>Use mosquito netting on baby carriages and playpens</li> </ul>
Moderate	There is a moderate probability of being bitten by a WNV mosquito.	<b>To Prevent: add to previous level</b> <ul style="list-style-type: none"> <li>Wear mosquito repellent</li> <li>Wear long sleeves and long pants when weather permits</li> <li>Use mosquito netting on baby carriages and playpens</li> <li>Dump standing water twice weekly</li> </ul>
High	This week has been identified as 'high risk' of being bitten by a WNV mosquito based on: high number of WNV mosquitoes identified and high number of historical human cases of WNV.	<b>To Prevent: add to previous level</b> <ul style="list-style-type: none"> <li>People over 50 or those who are immune compromised may consider adjusting outdoor activity to avoid peak mosquito hours (from dusk to dawn).</li> </ul>

### **Highlights this week:**

- **Northwest:** High risk due to a significant increase in the number of *Culex* species mosquitoes trapped this week.
- **North Central:** High risk due to a significant increase in the number of *Culex* species mosquitoes trapped this week and increase in historical human cases.
- **Northeast:** Moderate risk due to an increase in the number of *Culex* species mosquitoes trapped this week.
- **Southwest:** Moderate risk due to a significant increase in the number of *Culex* species mosquitoes trapped this week and decrease in historical human cases.
- **South Central:** High risk due to a significant increase in the number of *Culex* species mosquitoes trapped this week and increase in historical human cases.
- **Southeast:** Moderate risk due to an increase in the number of *Culex* species mosquitoes trapped this week.

### **Methods for Risk Assessment**

We utilize three factors in our risk assessment model; temperature, mosquito surveillance data, and human cases of WNV. Each factor has set benchmarks and each benchmark is assigned a value. The values from these three categories are averaged. The average rating is assigned a WNV risk level for each week.

- High-risk environmental conditions include above-normal temperatures with or without above-normal rainfall. We use the average daily temperature during the prior 2 weeks as our benchmark.
- *Culex* species of mosquitoes serve as the main source of WNV transmission to people and horses. Relative abundance of *Culex* species mosquitoes compared to the same week in the previous year and the number of *Culex* species mosquitoes are evaluated each week. Greater than 40 *Culex* species mosquitoes collected in a week increases this factor to its maximum value.
- Number of human cases of WNV each week based on the average number of cases in the previous five years.

For WNV human case counts updated weekly, visit [http://www.kdheks.gov/epi/case\\_reports\\_by\\_county.htm](http://www.kdheks.gov/epi/case_reports_by_county.htm). For more information on arboviral disease surveillance in Kansas, visit our website at; [http://www.kdheks.gov/epi/arboviral\\_disease.htm](http://www.kdheks.gov/epi/arboviral_disease.htm) or contact the Kansas Department of Health and Environment's Infectious Disease Epidemiology and Response section at 1-877-427-7317 or e-mail at [kdhe.epihotline@ks.gov](mailto:kdhe.epihotline@ks.gov).